

Grade 3

Classroom

Strategies

Blackline Masters

0

1

2

3

4

5

6

7

8

9

Hundred Board

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

ADOPT A NUMBER

1. This is a long-term project which can continue all year. Write the numerals 0-100 (one each) on a separate card - 5 by 8 cards are good.
2. Each student in your class will “adopt a number” by randomly drawing the number card out of a pile until all 100 cards have been distributed. Each student will be adopting 3 or 4 numbers depending on the size of your class. You may want to control distribution so that each student has some low and some high numbers.
3. Whenever a student learns something about his or her numbers, the student will record this information on the back of the number card. There may be times when you will assign students to record certain types of information about their numbers. For example, if you have just spent time discussing even and odd numbers, students will record this information about their numbers.

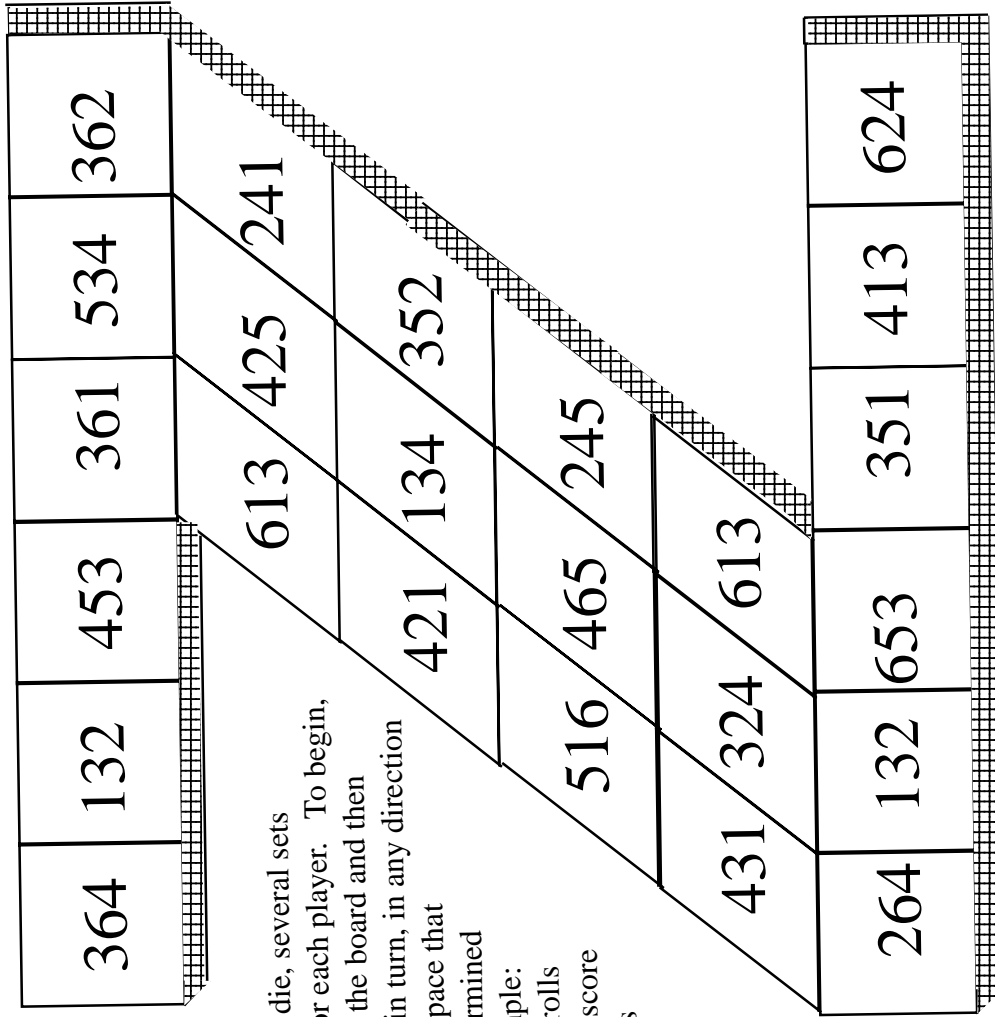
Examples of information which might be recorded include:

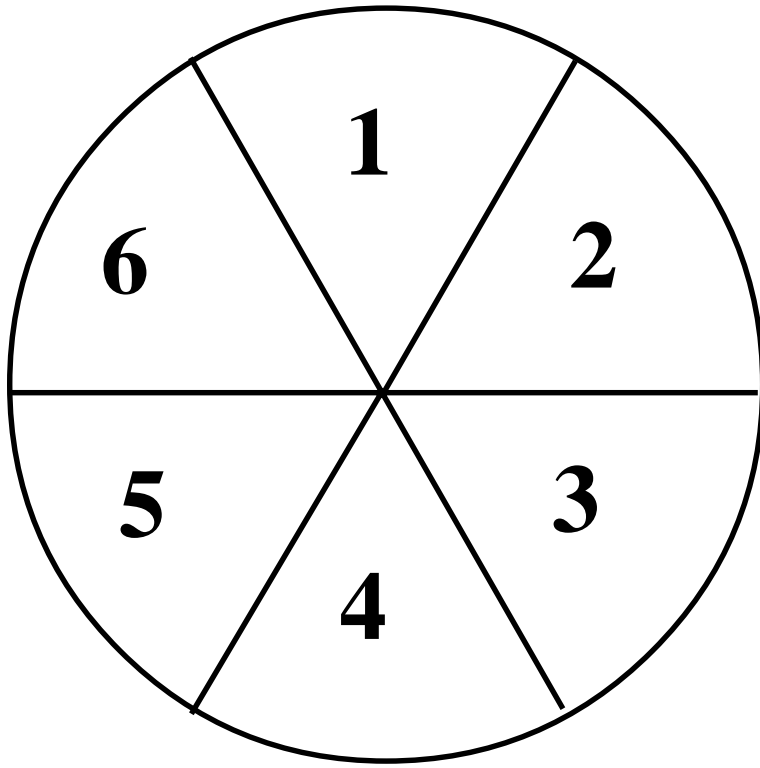
- (odd or even)
 - multiples of numbers (2, 5, 9, 10)
 - palindromes (read the same in both directions, like 11 and 99)
 - common examples of these numbers (12 things in a dozen, the largest number on a clock, 55 miles per hour speed limit, 6 faces on a cube, etc.)
 - ways to make this amount with coins (6 may be 6 pennies or 1 nickel and 1 penny)
 - things approximately that length or weight
 - examples of a number used in literature (3 pigs, 7 Chinese brothers)
 - story problems using numbers
 - create a NIM game using your numbers
 - any statistical data related to a number (the Average American laughs 15 times a day)
 - write riddles or limericks
 - data related to the class (27 students in our class on Nov. 15)
 - write “enigmatic equations” (16 = O. in a P. These become problems to solve. The answer is 16 equals ounces in a pound.)
4. If a student moves from the class, his or her numbers are put up for adoption by other class members. If a new student moves into the class, then several others give a number for adoption. Thus all numbers are always cared for.
 5. If you have an opportunity to explore computer database systems with your class, all the gathered information about each number can be stored on the database.
 6. At the end of the year, have a special event devoted to telling about the numbers. Teams of children could travel to other classes to share what they have learned.

The Big "Z"

Directions:

Each pair of students needs a game board, a die, several sets of 1-6 cards, or a spinner, and one marker for each player. To begin, each player puts a marker on any number on the board and then rolls a die. The player can move one space, in turn, in any direction (vertically, horizontally, or diagonally) to a space that contains the digit on the die. Points are determined by the place value of that number. For example: If a player's marker is on 134 and he or she rolls a "6", the player may move to the 516. The score would be 6 points, since the 6 is in the one's place. If the move is to 613, the score is 600 points. Players take turns until each player has 5 turns. Students total their scores at the end of the game. High score wins.





1	2
3	4
5	6

2	4	6
1	3	5

10

20

30

40

50

60

70

80

90

0

100

200

300

400

500

600

700

800

900

0

1000

2000

3000

4000

5000

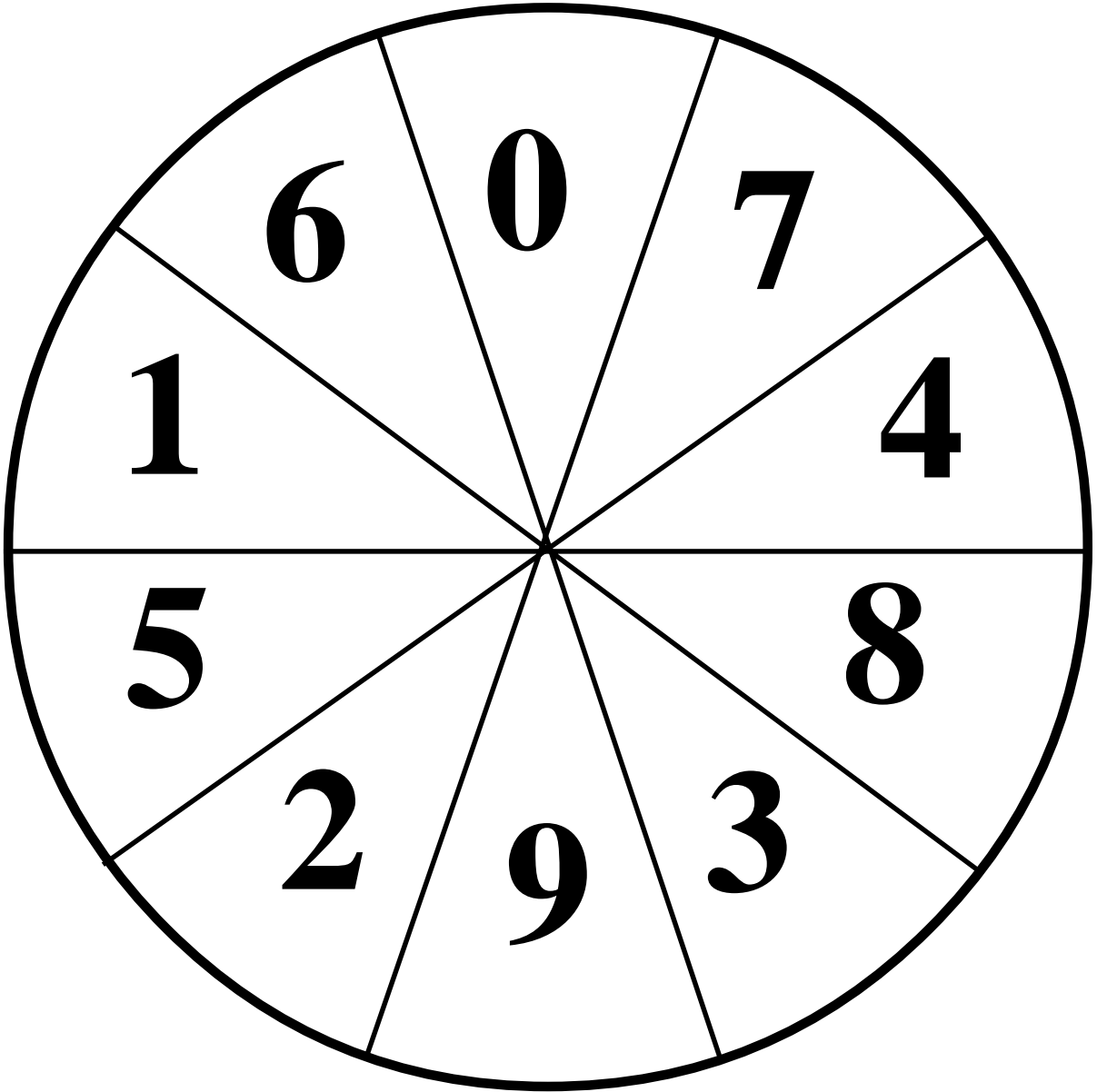
6000

7000

8000

9000

0



House Numbers

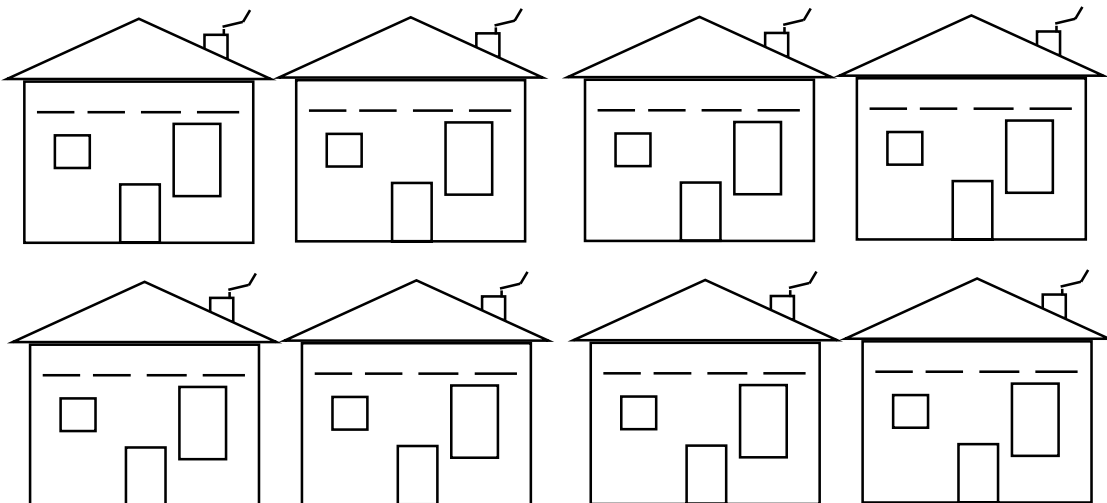
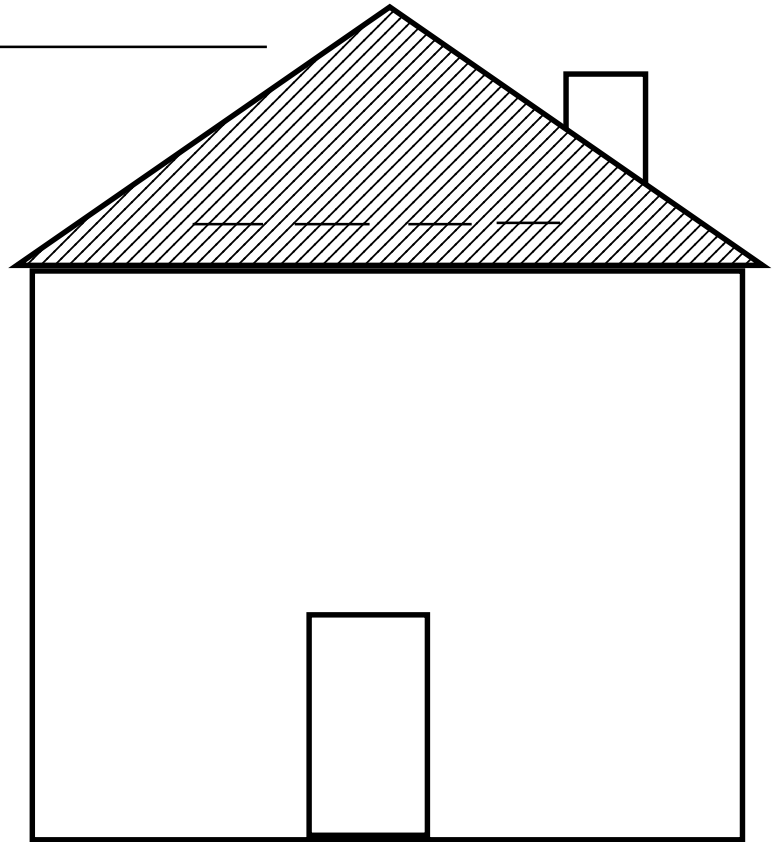
1. Place 0 to 9 digit cards face down. Draw four cards. _____
What numbers did you draw?

2. What four-digit numbers can you make using these numerals? _____

Use these numbers for two projects!

3. With your group, talk about how houses are numbered along a street. Think about odd and even numbered houses and how the numbers are arranged from lowest to highest. Write one of your house numbers on each small house below. Make up two more numbers for the same street. Cut out the houses and glue them on construction paper to show how they will be located on your street.

4. Choose your favorite house number and write it on the house to the right. Complete the house and color it. Cut it out to go in the class's community bulletin board.



100th Day Celebration

Begin your 100th day celebration during the first week of school. Use a roll of adding-machine tape and begin printing the numbers of the days you have been in school. 1, 2, 3. . . Tell your class that when day 100 occurs there will be a special celebration. Have the students estimate during which month the 100th day will fall. As the days fly by, many activities can be related to the coming event - learning 100 new words, writing a story with 100 words, estimating how much 100 centimeters of a coin would be worth, making 100 day posters, writing 100 letters to students in schools 100 miles away, and on and on. Your students will likely think of other 100 day activities.

Have students prepare personally by collecting a 100 display to bring in and share for the 100th day celebration. It can be as simple as 100 pennies, beans or bottle caps, or as elaborate as a person 100 years old! It will be limited only by your students' imaginations. If your energy and resources permit, parents can be invited to a school-wide celebration and display in your 100 Days Museum! You might even get a volunteer to bake 100 cookies!

When the 100 days celebration has passed students can write about the day, its activities and their impressions. Now you have the makings of a 100th day Book. This can be shared with other students and used to whet the appetites of next year's class.

Here are some ideas to get you started:

- who was the U.S. President 100 years ago?
- what rooms are 100 steps from your classroom?
- how long is a line 100 students long? how large is the circle they make if they join hands? will a school bus fit inside? two buses? three buses?
- how long is a chain of 100 paper clips? how much does it weigh?
- how many ways can you write an equation that equals 100?
- what is on the 100 page of your science textbook? math book? social studies book?
- how many times can you skip rope or jump in 100 seconds?
- how long will it take to snap your fingers 100 times?
- whose birthday is closest to the 100th day?
- how long is a train of 100 snap cubes?
- in what year will you be 100 years old?



- how old were you after 100 months? 100 weeks?
- when was your 100th day?
- what will your class be doing on the 100th minute next Tuesday?
- how many words can you make from the letters in ONE HUNDRED?
- how many dozen eggs does it take to make 100?
- draw a polygon with a 100 cm perimeter
- what is the 100th day in the calendar year? is it the same every year?
- identify snacks that have 100 calories
- who was the N.C. Governor 100 years ago?
- find something that weighs 100 grams; 100 ounces
- how many times can you find 100 in a newspaper?
- make a list of what you could buy with \$100.00
- how long does it take your heart to beat 100 times?
- how much is 100 pennies + 100 nickels + 100 dimes + 100 quarters worth?
- how long does it take to bounce a ball 100 times?
- who will be the 100th person to enter the lunchroom today?
- find a snack that has 100 pieces?
- if you cooked 100 pieces of pasta, how many people could you serve?
- roll a number cube 100 times, tally the results and make a graph
- give a certificate for 100 days of perfect attendance
- find the 100th word in the dictionary
- how long does it take to run a 100-meter race
- who can run farthest in 100 seconds?
- how long will it take to melt 100 ice cubes?
- what is the 100th school bus to enter the parking lot next week?
- when you write the names of North Carolina's 100 counties what vowel is used most? least? how about the consonants?
- have everyone put their heads on their desks, sit up when you think 100 seconds have gone by
- write a story about the world 100 years from today
- if $a = 1¢$, $b = 2¢$, $c = 3¢$, etc, find words or names that equal 100¢
- how long are 100 soda cans lined up end to end?
- how many cups of popcorn can you get from popping 100 kernels?
- what is the smallest container that will hold 100 cups of water?
- how many states were there 100 years ago?
- who is the 100th person in the phone book?
- how many liters of water in 100 ice cubes?
- what day of the week is 100 days from today?
- what time will it be 100 minutes from now?



294	43	303
128	186	283
72	423	342
67	385	57
337	441	18
216	55	168
475	299	326

Names:

Build-a-Number

Team # _____

Our numbers in ascending order:

Our 5th number:



Our numbers in ascending order:

Our 5th number:



Our numbers in ascending order:

Our 5th number:

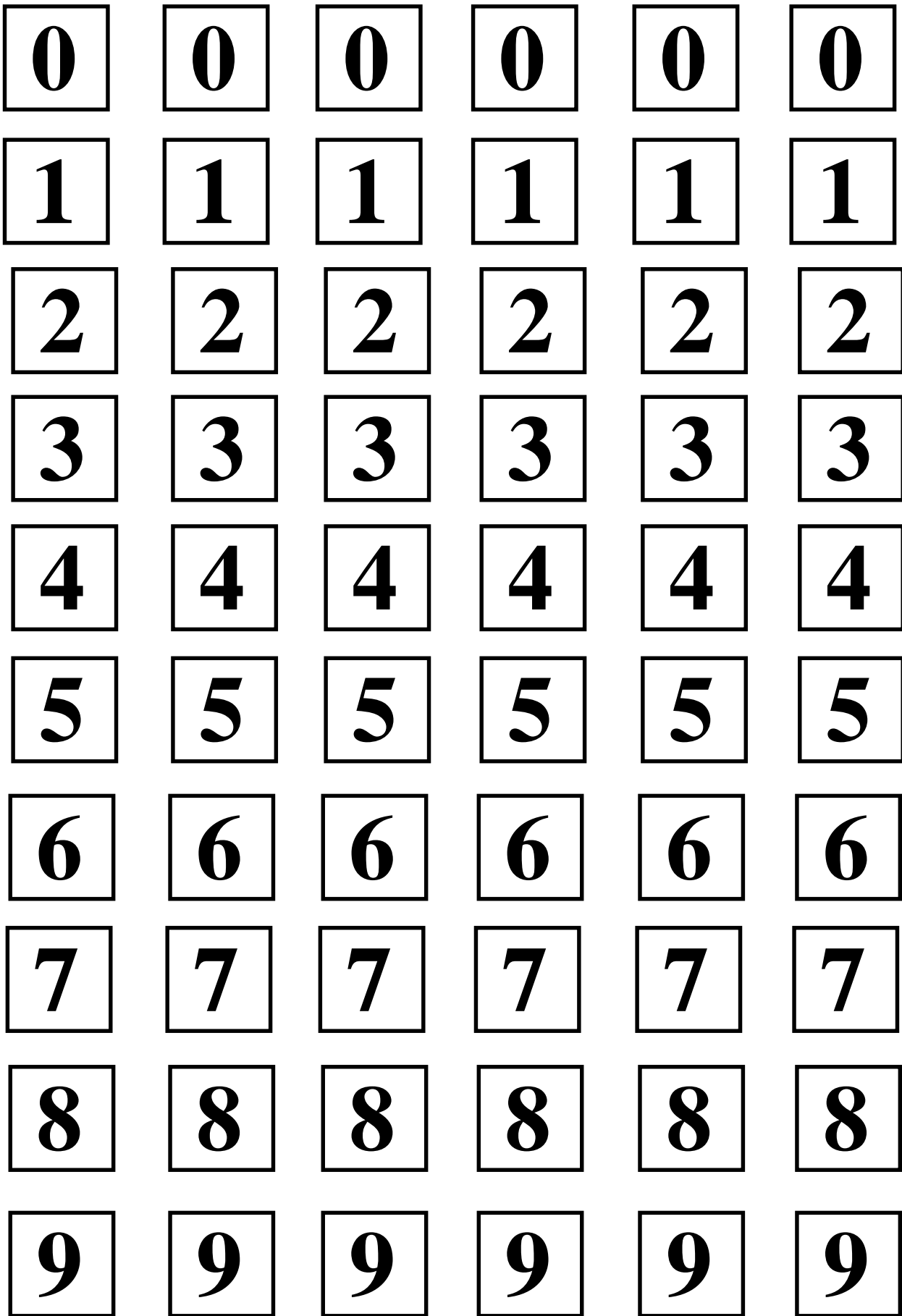


<p>(1) <i>Build a number that fits your clue.</i></p> <p>(2) <i>Tell your group why you built that number <u>and</u> why it fits the clue.</i></p> <p>(3) <i>As a team, write your numbers in ascending order.</i></p> <p>(4) <i>Now, as a team, build a 5th number fitting all the clues. Represent the 5th number in at least three different ways. These might include</i> <i>a model,</i> <i>words,</i> <i>standard or expanded form.</i></p> <p><i>If this is <u>not</u> possible, tell why. Find the sum of your other numbers.</i></p>	<p>(1) <i>Build a number that fits your clue.</i></p> <p>(2) <i>Tell your group why you built that number <u>and</u> why it fits the clue.</i></p> <p>(3) <i>As a <u>team</u>, write your numbers in ascending order.</i></p> <p>(4) <i>Now, as a team, build a 5th number fitting all the clues. Represent the 5th number in at least three different ways. These might include</i> <i>a model,</i> <i>words,</i> <i>standard or expanded form.</i></p> <p><i>If this is <u>not</u> possible, tell why. Find the sum of your other numbers.</i></p>
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<p>Build a number with only odd digits</p>	<p>Build an odd number with three even digits</p>
<p>Build an even number less than 3001</p>	<p>Build an odd number with one even digit</p>
<p>Build a number with an odd digit in tens place</p>	<p>Build a number greater than 9257 with an odd digit in ones place</p>
<p>Build a number greater than 8789 with an even digit in tens place</p>	<p>Build a number less than 9148 with an odd digit in ones place</p>
<p>Build a number greater than 1599 but less than 1613 with an odd digit in ones place</p>	<p>Build a number greater than 6322 with an even digit in tens place</p>

Build a number greater than 7345	Build a number less than 6420
Build a number between 5600 and 7204	Build a number between 3205 and 5317
Build a number greater than 1479	Build a number less than 1219
Build a number between 7189 and 8238	Build a number less than 2567
Build your favorite number	Build a number with all digits even

<p>Build a number between 1969 and 2471 with an odd digit in ones place</p>	<p>Build a number between 3491 and 5600 with an odd digit in tens place</p>
<p>Build an odd number between 2340 and 2790</p>	<p>Build an even number between 1692 and 2032</p>
<p>Build a number less than 1560 with a 7 in tens place</p>	<p>Build an even number less than 2324 with a 9 in tens place</p>
<p>Build a number greater than 3609 with a 4 in tens place</p>	<p>Build a number less than 5279 with a 5 in tens place</p>
<p>Build an odd number greater than 7478 with a 1 in tens place</p>	<p>Build an even number less than 6399 with a 6 in tens place</p>





Name _____ Date _____

Division Dilemmas I

A

B

C

D

E

F

G

H

I

	Number of objects	Number sharing equally	How many did each get?	Leftovers
A				
B				
C				
D				
E				
F				
G				
H				
I				

Directions: Reach into a container and pull out a handful of counters (beans, buttons, cubes, etc.). Complete row A on the chart by dividing into 2 groups. Draw a new handful for row B. Continue in the same manner.



Division Dilemmas II

	Number of objects	Number sharing equally	How many did each get	Leftovers	\div	$\overline{)}$
A		3				
B		2				
C		4				
D		2				
E		3				
F		5				
G		4				
H		2				
I		3				

Directions: Reach into a container and pull out a handful of counters (beans, buttons, cubes, etc.). Complete row A on the chart by dividing into 3 groups. Draw a new handful for row B. Continue in the same manner.

20	21	22
23	24	25
26	27	28
29	30	31
32	33	34
35	36	37
38	39	40

41

42

43

44

45

46

47

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56

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60

61

62	63	64
65	66	67
68	69	70
71	72	73
74	75	76
77	78	79
80	81	82

83	84	85
86	87	88
89	90	91
92	93	94
95	96	97
98	99	100
FREE	FREE	FREE

9387

1257

3212

7645

6891

321

346

892

7317

862

2547

1257

3444

7645

7790

6227

3126

8828

1414

8127

381

654

3454

9645

7692

3818

3926

8128

1414

8127

Order in the Courtroom!

